

Amendments to the Claims

This listing of claims will replace all prior versions,
and listings, of claims in the application:

Claims 1-6 (canceled)

1 Claim 7 (original): A distance-measuring device
2 comprising:
3 a distance-measuring optical system for dividing an
4 image of a subject into two images;
5 image pick up sensors formed on a semiconductor
6 substrate for pick upping the two images;
7 a processing circuit formed on the semiconductor
8 substrate for summing outputs of the image pick
9 up sensors in a predetermined direction into
10 one-dimensional data; and
11 a control circuit for detecting a main subject from
12 the one-dimensional data output from the processing
13 circuit, and setting a distance-measuring area for the
14 main subject.

1 Claim 8 (original): A distance-measuring device
2 comprising:
3 a distance-measuring optical system for dividing an
4 image of a subject into two images;
5 photographic sensors formed on a semiconductor
6 substrate for pick upping the two images;

7 a processing circuit formed on the semiconductor
8 substrate for summing outputs of the image pick
9 up sensors in a predetermined direction into
10 one-dimensional data;
11 main subject detecting means for detecting a main
12 subject from the one-dimensional data;
13 setting means for setting a distance-measuring area
14 for the main subject; and
15 distance-measuring means for executing a distance
16 measurement operation in the set distance-measuring area.

1 Claim 9 (original): A distance-measuring device
2 comprising:
3 two optical systems having a parallax therebetween;
4 a photographic element formed on a semiconductor
5 substrate for photographing two images formed by the
6 optical systems;
7 processing means formed on the semiconductor
8 substrate for executing image processing on an output
9 from the photographic element; and
10 distance-measuring means for executing a distance
11 measurement operation on the basis of the output from the
12 processing means.

1 Claim 10 (original): A distance-measuring device
2 comprising:
3 two optical systems having a parallax therebetween;

*Claims
9-11
Previously
Cancelled
in the ancillary
filed 4/28/03
& confirmed
via telephone
interview
10/29/03
Dane
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4 a photographic element formed on a semiconductor
5 substrate for photographing two images formed by the
6 optical systems;
7 processing means formed on the semiconductor
8 substrate for executing image processing on an output
9 from the photographic element;
10 main subject detecting means for detecting a main
11 subject on the basis of an output from the processing
12 means; and
13 distance-measuring means for executing a distance
14 measurement operation on the basis of the output from the
15 processing means and an output from the main subject
16 detecting means.

1 Claim 11 (original): The distance-measuring device
2 according to claim 10, wherein the processing means has a
3 plurality of modes, and can individually set an output
4 for the main subject detecting means and an output for
5 the distance-measuring means.

1 Claim 12 (original): A distance-measuring device
2 comprising:
3 an AF area sensor formed on a semiconductor
4 substrate for picking up two images formed to have
5 a parallax therebetween, and integrating sensor data that
6 corresponds to an appropriate amount of light;

7 a photo reception signal processing circuit formed
8 on the semiconductor substrate for creating outline data
9 based on the sensor data from the AF area sensor;
10 a control section detecting a main subject in
11 a photography screen on the basis of the outline data
12 output from the photo reception signal processing
13 circuit, and setting, in the photography screen, a
14 distance-measuring area including the main subject; and
15 a distance-measuring section for executing distance
16 measurement in the distance-measuring area set by the
17 control section.

1 Claim 13 (original): The distance-measuring device
2 according to claim 12, wherein the AF area sensor
3 includes:
4 a pixel area in which photoelectric elements are
5 arranged in a matrix, the photoelectric elements each
6 receiving image for distance measurement formed by two
7 photoelectric lenses located before the AF area sensor
8 and having a parallax therebetween;
9 a horizontal/vertical control circuit operable under
10 the control of the control section for scanning and
11 outputting an amount of the image for distance
12 measurement accumulated by the photoelectric elements
13 included in the pixel area;

14 an output circuit for amplifying, by a predetermined
15 level, a signal output from the horizontal/vertical
16 control circuit; and
17 a sensor control circuit operable under the control
18 of the control section for controlling received-image
19 accumulation and output operation of the AF area sensor,
20 the pixel area, the horizontal/vertical control
21 circuit, the output circuit and the sensor control
22 circuit being formed on a silicon substrate by a CMOS
23 process.

1 Claim 14 (original): The distance-measuring device
2 according to claim 13, wherein the horizontal/vertical
3 control circuit of the AF area sensor sequentially
4 applies a sensitivity control signal to the photoelectric
5 elements in units of one row of the matrix, thereby
6 extracting an amount of image for distance measurement
7 accumulated by those of photoelectric elements, which are
8 located in each column of the matrix, extracting only a
9 column at which the amount of image for distance
10 measurement changes, detecting, simultaneously and in
11 a parallel manner, pieces of outline data each
12 corresponding to one scanning line, and outputting
13 the detection result as the outline data.

Claims 15-28 (canceled)